SPOTLIGHT

Critical Connections: Transdisciplinary Capacity and Youth Engagement for Sustainable Small-Scale Fisheries and Coastal Communities

By Emi Koch and Ratana Chuenpagdee

Move at the speed of trust. Focus on critical connections more than critical mass.

- Mervyn Marcano's remix of Stephen Covey's "speed of trust" concept

INTRODUCTION

As the global push for sustainable development intensifies, public and private actors in fisheries and ocean management are encouraged to support United Nations Sustainable Development Goal (SDG) 14, "Life Below Water." For those involved in small-scale fisheries (SSF), the emphasis must shift toward "life above water" (Jentoft, 2019), reflecting the complex social, cultural, and heritage values that define these communities. To create lasting SSF sustainability, programs must be inclusive and community-driven. This shift requires transdisciplinary capacity building and youth engagement, fostering experience sharing and collaboration for transformation. Initiatives like Too Big To Ignore and Coast 2 Coast take this approach, focusing on relationship building, shared responsibility, and inclusive engagement to shape meaningful, grounded change.

PROGRAM DESCRIPTIONS

TOO BIG TO IGNORE

Founded in 2012, Too Big To Ignore (TBTI; https://tbtiglobal.net/) is a global research network that addresses governance challenges in SSF by building capacity through collaboration among diverse stakeholders. TBTI works to strengthen SSF contributions to food security, social well-being, and ecosystem health. Through regional conferences, country hubs, collaborative publications, and transdisciplinary training, TBTI engages researchers, policymakers, practitioners, and communities in co-creating solutions tailored to local contexts. The network emphasizes interactive governance principles (Kooiman et al., 2005), addressing governance across daily operations (first order), institutional structures (second order), and underlying values, images, and principles (meta order).

A key component of TBTI's work is its country hubs, which are established as platforms for knowledge exchange and collaboration between local communities and international research initiatives. These hubs facilitate workshops, policy discussions, and research collaborations relevant to local and national contexts, creating spaces for problem co-identification and knowledge co-production that can drive sustainable SSF governance on the ground. Another core activity of TBTI is the transdisciplinary training module implemented in over 50 countries and involving more than 500 researchers, policymakers, and community groups. Through the use of realworld case studies, the module is flexible, accommodating local needs and encouraging collaborative solutions.

COAST 2 COAST

Founded in 2014, Coast 2 Coast (C2C; https://www.coast2coast-movement.com/) is a Peruvian nonprofit organization designed to address a growing disconnect that young people feel from their

social-ecological surroundings in SSF communities. C2C partners with local schools as hubs for knowledge exchange, capacity building, and community engagement in order to foster a sense of place and agency among youth in SSF communities.

During the International Year of Artisanal Fisheries & Aquaculture 2022, C2C worked with educators in Peru, Madagascar, India, and Nigeria to turn the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (called SSF Guidelines; FAO, 2015) into a curriculum for learners to explore their fishing villages as webs of social-ecological relationships. Over 15 months, teachers collaborated to create activities that emphasized mindfulness, scientific thinking, positive youth development, nature connectedness, and social-emotional learning. Over 400 students ages 12–18 participated, gaining and contributing to broad understanding of their fisheries, emphasizing expeditionary, place-responsive learning while monitoring the local implementation of the SSF Guidelines. Students collected data about their surroundings through assignments that involved interviewing elders, photographing evidence of climate change impacts, and mapping women's roles along the value chain. Upon completing the curriculum, students had gathered enough information to contribute to TBTI's "20 Questions about Small-Scale Fisheries." This invited students to create community profiles on the Information System on Small-Scale Fisheries (ISSF), which provides key data on SSF sectors worldwide, synthesizing knowledge about their importance and contributions. TBTI uses these data to inform policies that promote well-being and sustainable fisheries, including with respect to Blue Justice (Arias Schreiber et al., 2022).

RESULTS

TBTI's transdisciplinary research and capacity-building effort has led to several tangible outcomes, including two peer-reviewed, edited volumes related to the SSF Guidelines, their implementation, and including from legal and policy perspectives. TBTI's country hubs have helped build local governance capacity. For example, the TBTI Ecuador hub, coordinated by the Charles Darwin Foundation, aims to facilitate collaboration among governments, researchers, and community leaders to address overfishing and habitat degradation while incorporating conservation efforts. This and other TBTI initiatives are designed to promote inclusive, interactive governance solutions reflecting the specific needs of SSF communities.

By partnering with teachers and leveraging schools as hubs for capacity sharing and awareness raising, C2C fosters dynamic learning environments that enhance students' knowledge, abilities, and values for the sustainable use of marine resources. C2C's programs cultivate a sense of care for the environment and community, emphasizing capacity sharing to envision a sustainable future beyond 2030.

Through place-responsive programs, C2C encourages creative expression and experiential learning, helping students build deeper connections to their environments. In Peru alone, C2C has engaged over 2,000 students, many of them expressing a newfound interest in

marine conservation. While some students aspire to explore careers in cities, they are also interested in supporting their communities' well-being in the long term.

Students' research and storytelling projects have sparked broader community discussions on sustainability. In several instances, their insights have contributed to larger research initiatives and have influenced more comprehensive fisheries management policies.

LESSONS LEARNED

TBTI and C2C foster capacity building and meaningful change in SSF communities by focusing on inclusive relationships, embracing adaptability, and creating space for community-driven solutions. Drawing from the principles of *Emergent Strategy* by Adrienne Maree Brown (2017), key lessons have emerged for fostering sustainable SSF communities.

- Change is constant—be like water. Both TBTI and C2C adapt to the ever-changing realities of SSF communities. By being fluid and responsive, the programs can address issues as they arise, ensuring relevant interventions.
- There is always enough time for the proper work. Patience and presence are central to TBTI's and C2C's strategies. Building trust and meaningful relationships takes time. Rushing the process undermines potential impact. Investing time in trust building results in stronger, more sustainable outcomes.
- There is a conversation in the room that only these people can have at this moment—find it. Engaging with communities requires creating space for dialogue. Both TBTI's transdisciplinary research and C2C's participatory action research emphasize listening to unique local insights and incorporating them in shaping solutions specific to people, place, and time.
- Never a failure, always a lesson. Adjusting programs based on participant feedback has allowed TBTI and C2C to continuously improve, embracing an iterative learning process.
- Trust the people, they will become trustworthy. Prioritizing relationship building over quick results has enabled communities to step into leadership roles. Youths, in particular, take ownership of their futures, reflecting on how their aspirations impact their communities' futures.
- Move at the speed of trust. Progress happens best at the "speed of trust." Rushing capacity building without genuine trust building leads to superficial outcomes. The time invested in cultivating trust is essential for long-term success.
- Focus on critical connections more than critical mass. TBTI's country hubs and C2C's school partnerships focus on building localized networks that enable the co-production of knowledge and sensible governance solutions.
- Less prep, more presence—what you pay attention to grows.
 Both TBTI and C2C emphasize presence and responsiveness to community needs, paying attention to the lived experiences of SSF communities and youth aspirations.

PROGRAM EVALUATION AND FUTURE DIRECTIONS

Since its inception, TBTI has trained over 1,000 participants and collaborated with researchers, policymakers, and community members in more than 50 countries. C2C has engaged some 5,000 students from several countries, such as India, Vietnam, Costa Rica, and Peru, with the program expanding as more schools express interest in integrating the SSF Guidelines Curriculum (https://www.ssfguidelinescurriculum.com/sign-up-to-download) into their educational frameworks

Both programs are committed to evaluating their long-term impacts. TBTI uses instant feedback and follow-up evaluations to assess how its training programs have affected participants' understanding of SSF governance. C2C has started longitudinal follow-ups with students to gauge their continued involvement in environmental conservation and community leadership. Based on feedback from participants and community members, TBTI and C2C have identified areas for improvement. TBTI plans to expand its country hubs and deepen its focus on intergenerational equity in fisheries governance. C2C aims to enhance its curriculum by incorporating more advanced storytelling tools and expanding its reach to additional countries.

Academic institutions, government grants, and international research partnerships fund TBTI. C2C receives support from private donors, government institutions, intergovernmental agencies like the Food and Agriculture Organization of the United Nations (FAO), and foundations. Both programs actively seek additional funding to scale their efforts and sustain their long-term impacts while integrating program sustainability in training models to help local communities obtain funds to support their own initiatives.

CONCLUSION

SSF and coastal community futures depend on transdisciplinary capacity building and youth engagement. Working in collaboration, TBTI and C2C refer to this as "Young Futures," recognizing that the futures need to be crafted and pursued by the young people in the communities. TBTI's transdisciplinary research frames SSF as key contributors to global sustainability. C2C's focus on youth involvement through participatory research and storytelling strengthens young people's connections to their surroundings, engaging them as leaders in sustainability.

By focusing on critical connections and the future, TBTI and C2C position SSF as essential to sustainable development and to building and sharing capacity through trusted relationships.

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ARTICLE DOI. https://doi.org/10.5670/oceanog.2025.136